



information

Characteristics of Nerve Agent VX

Nerve agent VX, which is stored at Newport Chemical Depot in Newport, Indiana, is a member of the organo-phosphate family, similar to present day pesticides. It is a clear, odorless and tasteless liquid with an appearance similar to that of motor oil. VX can become an aerosol (very small droplets) through explosion, or a vapor through ignition. It is heavier than water and evaporates 2,000 times more slowly.

VX is highly toxic in its liquid, aerosol and vapor forms. It is most hazardous when absorbed through the skin. As a vapor or aerosol, it can be inhaled and absorbed through the lungs. It also can be absorbed through the digestive system if eaten or swallowed.

VX is a rapid-acting, lethal nerve agent that affects the nervous system by interfering with the signals sent from the brain to the vital organs and other parts of the body. VX affects the body by blocking the action of the enzyme acetycholinesterase (ACh). When the enzyme is blocked, messages from the brain are short-circuited at the nerve endings. As a result, hyperactivity occurs in the organs stimulated by these nerves. If VX enters the body, convulsions or even death can result.

Atropine and 2-PAM Chloride are pharmaceutical antidotes that relieve the symptoms of VX exposure. They must be injected immediately after exposure to be effective. Common household bleach can be used to decontaminate the skin if contact is made with VX.

For more information on the Alternative Technologies and Approaches Program, call (800) 488-0648 or visit our web site at http://www.cma.army.mil/. You also are encouraged to visit the Newport Chemical Stockpile Outreach Office at 140 South Main Street, Newport, Indiana or contact the office at (765) 492-4445.